

Abstract

The invention concerns the technical field of micro-actuators used for mechanical, chemical, electrical or thermal functions in microsystems, for microelectronic applications such as chips, or biomedical functions such as microfluidics integrating cards. the invention concerns a micro-actuator (~~1, 60, 7~~) comprising a so-called main chamber (~~2, 63, 720~~), made in a solid support (~~3~~) and containing a so-called main pyrotechnic charge (~~6, 721~~), said main chamber (~~2, 63, 720~~) being sealed and delimited by solid support walls and by a deformable membrane (~~4, 62, 710~~), such that the gases emitted by the combustion of the main pyrotechnic charge (~~6, 721~~), enable the volume of said chamber (~~2, 63, 720~~) to be increased by deforming said membrane (~~4, 62, 710~~) while maintaining intact the solid walls of the main chamber (~~2, 63, 720~~). The invention is characterized in that it comprises means for evacuating the gases from the main chamber (~~720~~).